Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A personal verification device comprising:

a first detection section ~~which~~ that detects characteristic information of an operator;

a second detection section ~~which~~ that detects a pulse wave of the operator;

an index extraction section ~~which~~ that extracts at least one index by processing the pulse wave detected by the second detection section;

a first storage section ~~which~~ that stores first reference information ~~which~~ that is compared with the characteristic information;

a second storage section ~~which~~ that stores second reference information ~~which~~ that is compared with the at least one index; and

a verification section ~~which~~ that outputs a signal indicating that the operator is true when the operator is determined to be the same person as a registered person based on the result of comparison between the characteristic information and the first reference information, and also to be alive based on the result of comparison between the at least one index and the second reference information,

the characteristic information being a fingerprint, the first detection section being a fingerprint sensor that detects a capacitance that changes corresponding to ridges and valleys on a surface of a fingertip of the operator, and fingerprint information of the registered person being stored in the first storage section,

the fingerprint sensor including a signal detection element and a signal amplification element,

the signal detection element including a capacitance detection electrode and a capacitance detection dielectric film that covers the capacitance detection electrode, and

the signal amplification element being formed of a signal amplification thin film MIS semiconductor device that includes a gate electrode, a gate insulating film, and a semiconductor film, and the gate electrode being connected to the capacitance detection electrode.

2. (Currently Amended) The personal verification device as defined in claim 1, ~~wherein~~ the index extraction section ~~includes~~ including a wave height extraction section ~~which~~ that extracts as the at least one index a wave height of at least one of a plurality of inflection points in the pulse wave detected by the second detection section.

3. (Currently Amended) The personal verification device as defined in claim 1, ~~wherein~~ the index extraction section ~~includes~~ including a time extraction section ~~which~~ that extracts as the at least one index the time until occurrence of at least one of a plurality of inflection points in the pulse wave detected by the second detection section.

4. (Currently Amended) The personal verification device as defined in claim 1, ~~wherein~~ the index extraction section ~~includes~~ including a wave height ratio extraction section ~~which~~ that extracts as the at least one index the wave height ratio of a plurality of inflection points in the pulse wave detected by the second detection section.

5. (Currently Amended) The personal verification device as defined in claim 1, ~~wherein~~ the index extraction section ~~includes~~including:

a calculation section which calculates an acceleration waveform of the pulse wave detected by the second detection section; and

a wave height ratio extraction section ~~which~~ that extracts as the at least one index a wave height ratio of a plurality of inflection points in the acceleration waveform.

6. (Currently Amended) The personal verification device as defined in claim 1,

~~wherein~~ the index extraction section ~~includes~~ including a time ratio extraction section ~~which~~ that extracts as the at least one index the time ratio of a plurality of inflection points in the pulse wave detected by the second detection section.

7. (Currently Amended) The personal verification device as defined in claim 6,

~~wherein~~ the time ratio extraction section ~~extracts~~ extracting a ratio of a cycle and an ejection time of the pulse wave detected by the second detection section from the pulse wave.

8. (Currently Amended) The personal verification device as defined in claim 1,

~~wherein~~ the index extraction section ~~is~~ being an amplifier ~~which~~ that amplifies the pulse wave detected by the second detection section, the amplifier extracting as the at least one index an amplification ratio when amplifying the pulse wave into a signal having an amplitude larger than a predetermined amplitude by using an auto gain control function.

9. (Currently Amended) The personal verification device as defined in claim 1, further comprising:

a historical information storage section ~~which~~ that stores historical information on the at least one index extracted by the index extraction section; and

an information update section ~~which~~ that updates the second reference information in the second storage section based on the historical information.

10. (Currently Amended) The personal verification device as defined in claim 1, ~~wherein:~~

~~the characteristic information is a fingerprint;~~

~~the first detection section is a fingerprint sensor; and~~

~~fingerprint information of the registered person is stored in the first storage section~~when a capacitance of a transistor capacitor of the MIS semiconductor device being C_T and a capacitance of a capacitor between the capacitance detection electrode and the fingertip of the operator being C_D, $C_T > 10 \times C_D$ being satisfied.

11. (Currently Amended) The personal verification device as defined in claim 10,

~~wherein the fingerprint sensor detects a fingerprint by detecting capacitance which changes corresponding to ridges and valleys on a surface of a fingertip of the operator~~when a capacitance of a capacitor formed by the valley of the fingerprint is C_A, $C_T > 10 \times C_A$ being satisfied.

12. (Currently Amended) The personal verification device as defined in claim 11,

~~wherein~~ the fingerprint sensor ~~includes~~ including M (M is an integer equal to or larger than two) rows of power supply lines, N (N is an integer equal to or larger than two) columns of output lines, and M × N capacitance detection elements respectively provided at intersections of the M rows of power supply lines and the N columns of output lines.

13. (Canceled)

14. (Currently Amended) The personal verification device as defined in claim ~~13~~1,

~~wherein:~~

the fingerprint sensor further ~~includes~~ including a power supply select circuit connected to the M rows of power supply lines; and

the power supply select circuit ~~has~~ having M power supply pass gates provided between a common power supply line and the M rows of power supply lines, each of the M power supply pass gates being the thin film MIS semiconductor device for a signal amplification ~~which~~ that includes a gate electrode, a gate insulating film, and a semiconductor film.

15. (Currently Amended) The personal verification device as defined in claim ~~13~~1, ~~wherein:~~

the fingerprint sensor further ~~includes~~ including a signal select circuit connected to the N columns of output lines; and

the signal select circuit ~~has~~ having N output signal pass gates provided between a common output line and the N columns of output lines, each of the N output signal pass gates being the thin film MIS semiconductor device for a signal amplification ~~which~~ that includes ~~a~~ the thin film MIS semiconductor device for a signal amplification gate electrode, a gate insulating film, and a semiconductor film.

16. (Currently Amended) The personal verification device as defined in claim 12, further comprising:

a start switch ~~which~~ that activates the personal verification device when the fingerprint sensor detects a touch of a finger.

17. (Currently Amended) The personal verification device as defined in claim 1,

~~wherein~~ the second detection section ~~includes~~ including a pulse wave sensor having a light emitting element and a light receiving element, and optically detecting the pulse wave of the operator.

18. (Currently Amended) The personal verification device as defined in claim 10, ~~wherein:~~

the second detection section ~~includes~~ including a pulse wave sensor having a light emitting element and a light receiving element; and

the fingerprint sensor ~~is~~ being provided on a top surface of the pulse wave sensor, and part of the fingerprint sensor intersecting the path of the light emitted by the light emitting element or received by the light receiving element being formed of a material transparent to the wavelength of the light emitted by the light emitting element.

19. (Currently Amended) The personal verification device as defined in claim 18,

~~wherein~~ the pulse wave sensor ~~is~~ being forbidden to detect a pulse wave when a fingerprint detected by the fingerprint sensor has been determined to be false by the verification section.

20. (Currently Amended) The personal verification device as defined in claim 17, further comprising:

a low-cut filter ~~which~~ that cuts out a low frequency component from the pulse wave detected by the pulse wave sensor.

21. (Currently Amended) The personal verification device as defined in claim 20,

~~wherein~~ the low-cut filter ~~cuts~~ cutting out a low frequency in a range from 0.4 to 0.5 Hz.

22. (Original) A card-type information storage medium comprising the personal verification device as defined in claim 1.

23. (Currently Amended) The card-type information storage medium as defined in claim 22, further comprising:

a display section ~~which~~ that displays notification that the card-type information storage medium is in an available state, based on the signal from the verification section.

24. (Currently Amended) An information processing system comprising:

the card-type information storage medium as defined in claim 22; and

an information processing device ~~which~~ that performs processing based on information in the card-type information storage medium,

~~wherein~~ the information processing device ~~reads~~ reading information other than the information used for personal verification from the card-type information storage medium, after the signal is ~~input~~ inputted from the verification section.

25. (Currently Amended) The information processing system as defined in claim 24,

~~wherein~~ the information processing device ~~has~~ having a power supply section ~~which~~ that supplies power to the card-type information storage medium.

26-27. (Canceled)

28. (Currently Amended) A card-type information storage medium comprising the personal verification device as defined in claim 18,

~~wherein~~ a second thin film device having at least the fingerprint sensor ~~is~~ being provided on a top surface of a first thin film device having at least the pulse wave sensor.

29. (Currently Amended) The card-type information storage medium as defined in claim 28, further comprising:

a display section ~~which~~ that displays notification that the card-type information storage medium is in an available state, based on the signal from the verification section.

30. (Currently Amended) An information processing system comprising:

the card-type information storage medium as defined in claim 29; and

an information processing device ~~which~~ that performs processing based on information in the card-type information storage medium,

~~wherein~~ the information processing device ~~reads~~ reading information other than the information used for personal verification from the card-type information storage medium, after the signal is inputted from the verification section.

31. (Currently Amended) The information processing system as defined in claim 30,

~~wherein~~ the information processing device ~~includes~~ including a power supply section ~~which~~ that supplies power to the card-type information storage medium.